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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,839	11/03/2003	Mark R. Vaughn	SD-7265	5769
20567	7590	06/15/2005	EXAMINER	
SANDIA CORPORATION			RODRIGUEZ, RUTH C	
P O BOX 5800				
MS-0161			ART UNIT	PAPER NUMBER
ALBUQUERQUE, NM 87185-0161			3677	

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/700,839	VAUGHN ET AL.
	Examiner Ruth C. Rodriguez	Art Unit 3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 03 November 2003.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-3, 10, 11 and 17-19 is/are rejected.
- 7) Claim(s) 4-9 and 12-16 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 03 November 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/03/2003
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed 03 November 2003 has been considered for this Office Action.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: α , 68 and 48. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 250 words. It is important that the abstract not exceed 250 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because of the use of legal phraseology in the abstract, more specifically the word "means" in the sixth line. Correction is required. See MPEP § 608.01(b).

Claim Objections

5. Claims 1 objected to because of the following informalities:
 - Claim 1, line 3, --surface-- should be inserted between "interior" and "including".
 - Claim 1 recites the limitation "the abutted ends" in the fourth line, "the outside diameter" in the fifth line and "the minimum inside diameter" between

the fifth and sixth lines. There is insufficient antecedent basis for this limitation in the claim.

- Claim 10 recites the limitation "the abutted ends" in line 3, "the outside diameter" between the fourth and fifth lines and "the minimum inside diameter" in the fifth line. There is insufficient antecedent basis for this limitation in the claim.
- Claim 19, line 3, a period must be inserted at the end of the line. Correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3, 10, 11 and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Cain (US 2,790,409).

A method for controlling clamping an end of one hollow member (10) to an end of a second hollow member (12) where the members have substantially identical interior surfaces at each end and each interior surface includes a clamping surface extending from the interior surface (Figs. 1, 2 and 5). The

method comprises: (a) placing, at abutted ends of the members, a split ring (19) having a closed state where the ends of the ring are adjacent and the outside diameter of the split ring is less than a minimum inside diameter of the members at their ends (so that it could be installed in accordance with Figs. 1, 3 and 5).

The split ring has a V-shaped rim with two spaced projecting surfaces (Figs. 1 and 5); (b) separating the ends of the split ring until the rim engages the inside of the hollow members with one spaced projecting surface in contact with the clamping surfaces of one member and the other spaced projecting surface in contact with clamping surfaces of the other member (Figs. 1, 2 and 5).

The split ring is relaxed in the close state and is elastically deformed when the ends are separated and further comprising a spreader to keep the ends separated (Fig. 2).

The method further comprises controllably removing the spreader wherein the ring returns to the closed state and the members are no longer clamped together (so that the member could be separated).

An internal V-clamp holds two abutting hollow members (10,11) with substantially identical inside dimensions in an end-to-end relationship (Figs. 1, 2 and 5). Each member has a clamping surface extending from an interior surface adjacent the abutted end (Figs. 1, 2 and 5). The clamp comprises a split ring (19) and a spreader (24,25, 27). The split ring has a relaxed closed state where the ends of the are adjacent and the outside diameter of the split ring is less than the minimum inside diameter of the members at their ends (so that it could be installed in accordance with Figs. 1, 2 and 5). The split ring has a V-shaped rim

with two spaced projecting surfaces (Figs. 1, 2, 4 and 5). The spreader holds the split ring in an elastically stretched position such that the ring rim is pressed tightly against the interior surfaces of the members with one projecting surface being in contact with the clamping surface of one member and the other projecting surface being in contact with the clamping surface of the other member (Figs. 1, 2 and 5).

Each end of the split ring has a hole (receiving 25). The holes in each end are parallel (Fig. 2). The spreader comprises a spreader body (24,27) and a pair of parallel legs (25). The parallel legs are sized to fit in the split ring holes and extending from the spreader body (Figs. 1, 2, 4 and 5). The legs are spaced apart a distance equal to the distance between the split ring holes when the ring is in a stretched position (Figs. 1, 2 and 5).

The clamping surface is on a flange of the hollow member (Figs. 1, 2 and 5).

The clamping surface is on a groove in the interior of the hollow member (Figs. 1 and 5).

The internal V-clamp further comprises a shoulder affixed to the second member that is parallel to and spaced from an inside surface of the ring (Figs. 1 and 5). The shoulder keeps the ring centered in the members after the ring is in its relaxed state (Figs. 1 and 5).

Allowable Subject Matter

8. Claims 4-9 and 12-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Guttzeit (US 831,551), Taylor (US 2,650,115), Cain (US 2,790,409), Hirsch (US 3,127,383), Cirule et al. (US 3,960,395), Hardy, Jr. (US 3,974,835), Lamprecht et al. (US 4,013,373), Burkit (US 4,927,189, US 5,092,633 and US 5,201,550), Gundy (US 5,029,907) and Tolkoff et al. (US 6,634,825 B2) are cited to show state of the art with respect to V-clamps that have some of the features claimed by the current application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C Rodriguez whose telephone number is (571) 272-7070. The examiner can normally be reached on M-F 07:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (571) 272-7075.

Submissions of your responses by facsimile transmission are encouraged. The fax phone number for the organization where this application or proceeding

is assigned is 703-872-9306. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase the patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as PTO's mailroom processing and delivery time. For a complete list of correspondence **not** permitted by facsimile transmission, see MPEP § 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee that the applicant is paying by check **should not be** submitted by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP § 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to the Patent and Trademark Office (Fax No. (703) 872-9306) on (Date).
(Typed or printed name of person signing this certificate)
(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP § 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the

original response or a follow-up copy of the response has been transmitted by facsimile will cause further unnecessary delays in the processing of your application, duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-6640.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ruth C. Rodriguez

Ruth C. Rodriguez

Patent Examiner

Art Unit 3677

rcr

June 11, 2005